

**Preliminary Program**  
**International Workshop on Advanced Materials for Marine Construction**  
**February 5-7, 1997**  
**New Orleans, Louisiana**

**Organized by:**

Colorado School of Mines

**Primary Sponsors:**

U.S. Minerals Management Service  
American Bureau of Shipping  
American Welding Society  
Colorado School of Mines

**Objectives**

Advanced materials have contributed to significant progress in marine structures engineering in the past decade. Composite materials, weldable high-strength steels, duplex stainless steels, and titanium and aluminum alloys that are compatible with offshore environments offer the marine industry improved corrosion resistance and strength-to-weight ratios; but material costs, lack of fabrication expertise, and differences in design philosophy still present significant barriers to more widespread use.

Producers, designers, engineers, fabricators, inspectors, and users of marine materials, including corporate and government leaders, will define the current state of use of advanced materials in marine structures, and identify technical and non-technical barriers to more widespread use.

The workshop is designed to achieve the following objectives;

- Define current use of advanced materials in marine engineering
- Identify barriers to more widespread use of advanced materials in marine engineering
- Provide an international forum for participants from all aspects of materials production and use
- Promote the cost-effective use of advanced materials in marine structures
- Produce an archivable record of current usage and future opportunities for advanced materials in marine engineering

## **Working Groups**

1. Material Requirements for Moorings
2. Material Requirements for Risers
3. Material Requirements for Floaters
4. Material Requirements for Fixed Structures
5. Material Requirements for Harbors
6. Material Requirements for Process Equipment
7. Material Requirements for Pipeline/Flowline
8. Material Requirements for Secondary Structures

## **Sponsors**

- Minerals Management Service
- American Bureau of Shipping
- American Welding Society
- Colorado School of Mines
- McDermott, Inc.
- Mega-Float Research Association (Japan)
- ASME-OMAE
- Major Oil Companies
- Major Materials Producers

## **Workshop Location and Accommodations**

The Workshop will be held at the Doubletree Hotel and Conference Center in downtown New Orleans, Louisiana. The site is about 35 minutes from New Orleans International Airport, which is serviced by major national and international airlines. Airport limousines and taxis for the downtown hotel area leave opposite the baggage claim area. Weather in February is usually pleasantly mild, averaging 40-50° F in the daytime.

Special conference rates of \$135 per night, plus applicable taxes, for either a single or a double room, have been reserved at the Doubletree Hotel. Some rooms are available at the federal rate of \$65/night single and \$85.00/night double. To make reservations at these rates, call before January 1, 1997 and specify that you are attending the "Advanced Materials for Marine Construction" Workshop. Credit cards may be used to guarantee your room. The address of the Doubletree Hotel is 300 Canal Street, New Orleans, Louisiana 70130. The telephone number is (504) 581-1300; the fax number is (504) 522-4100.

## **Fees and Registration**

To register, please complete and mail the attached registration form. The registration fee is \$200 (US) if postmarked by January 5, 1997, and \$250 (US) after that date. This fee includes admission to the technical sessions, lunches on two days, coffee breaks, and a copy of the workshop proceedings.

Checks should be made out to “CSM Office of Continuing Education,” and mailed to the Office of Special Programs and Continuing Education (SPACE), Colorado School of Mines, Golden, CO 80401.

## **Further Information**

For further information concerning the workshop content, please contact:

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**For registration information, contact:**

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# Preliminary Program

**Wednesday, February 5, 1997**

7:30 a.m. Registration

8:30 Introduction and Welcome

8:45 Supporting Remarks

Minerals Management Service  
Dr. Chris Oynes, Regional Director

American Bureau of Shipping  
Mr. Robert D. Somerville, President

J. Ray McDermott, Inc.  
Mr. R. L. "Bobby" Rawle, Vice President

U.S. Coast Guard  
Rear Admiral Timothy W. Josiah

9:45 Break

10:00 Keynote Addresses

"Material Requirements for Ships"  
Mr. Mark Diderik Schnitler, Kvaerner

"Material Requirements for Offshore Facilities"  
Mr. Mark Matovich, Shell Oil Company (invited)

"Economic Implications of Marine Construction"  
Mr. Kensuke Taniguchi, Mitsui & Company, Ltd.

12:00 Lunch

1:20 p.m. Theme Papers

Steel for Marine Construction  
Dr. Malcolm Gray, Microalloying International, Inc.

Titanium for Marine Construction  
Mr. John C. Monsees, ITDA

Copper for Marine Construction  
Dr. Dale Peters, Copper Development Association, Inc.

Stainless Steels and Nickel Alloys for Marine Construction  
Mr. Jim Jenkins, Nickel Development Institute

2:50 Break

3:00 Working Groups

### **Thursday, February 6, 1997**

8:00 a.m. Opening Remarks

8:10 Theme Papers

Aluminum for Marine Construction  
Mr. Alex Cho, Reynolds Metal Company

Elastomers/Polymers for Marine Construction  
Dr. Andrew Stevenson, MERL

Composites for Marine Construction  
Dr. Steve Borleske, DuPont Advanced Materials

Concrete for Marine Construction  
Mr. Egil Mollestad, Aker Norwegian Contractores a.s.

9:40 Break

10:10 Reconvening of the Working Groups

12:00 Lunch

1:20 p.m. Working Groups

### **Friday, February 7, 1997**

8:00 a.m. Summary of the modified position white papers for the Day 3 meeting

Report from Working Group #1  
Dr. Mamdouh Salama, Conoco, Inc.

Report from Working Group #2  
Dr. F. Joseph Fischer, Shell Development Company

Report from Working Group #3  
Dr. Rolf Kvamsdal, Jr. Christian Wintermark, Kvaerner

Report from Working Group #4  
Mr. Sheldon Fortenberry, Chevron

9:30 Break

10:00 Reports continued

Report from Working Group #5  
Mr. Martin L. Eskijian, California State Lands Commission Marine Facilities  
Division

Report from Working Group #6  
Dr. Jim Ibarra, Amoco Corporation Research

Report from Working Group #7  
Mr. Olaf Anderson, STATOIL

Report from Working Group #8  
Mr. William Solitario, Ingalls Shipbuilding

12:00 Closure of the Workshop